

Work Order ID 51223

August 11, 2009 10:14:24 AM



Page 1

Item ID: D130-700-011

Revision ID: A

Item Name: Bearpaw

Start Date: 12/08/2009 Start Qty: 4.00

Required Date: 14/08/2009 Req'd Qty: 4.00

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Setup Start

Stop

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3167	Rev A1
IIN-D130-700	Rev A

0.00

100



DC

Document Control

DOCUMENT CONTROL

Memo *for CL 09/08/17*
Photocopy bluefile and create labels per PPP D130-700-011CHG001

8 02/08/08

0.00

120



Waterjet

FLOW CNC Waterjet

FLOW WATER JET

Memo
Cut Blank as per File D3167-1_BLANK

LB 9-8-11

(8)

Work Order ID 51223

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Page 2

Item ID: D130-700-011

Accept

Setup Start

Revision ID: A

Stop

Item Name: Bearpaw

Start Date: 12/08/2009 Start Qty: 4.00

Cust Item ID:

Required Date: 14/08/2009 Req'd Qty: 4.00

Customer:




Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  HAAS 1 HAAS CNC vertical machine #1	HAAS CNC VERTICAL MACHINING #1 Memo Note: (2) Bearpaw for (1) Kit 1-Inspect material for defects or damage prior to machining 2-Machine as per Folio FA285 and Dwg D3167 3-Deburr	0.00 0.00				8	1		
			Y.A 09/08/12						
140  QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00				8	1		
			Y.A 09/08/12						
150  QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00							
			MF 09/08/12						

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D130-700-011 PAR #: _____ Fault Category: Prod-Machining NCR: Yes No DQA: / Date: 05.09.01
Scrap / Scrap. QA: N/C Closed: / Date: 09.09.01

NCR: <u>51223</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/08/12	130	1 part scrap, chanter and thickness are under tolerance by .100 due to jig malfunctioning. (threaded insert popped out by .100) R.C.: Tooling error	<u>/</u> B. A 09/08/12	Loc-tite has been put on the threaded inserts (problem solved) - Replace affected inserts. - Scrap/destroy & replace qty 1 <u>B 112186</u> - verify/inspect tooling before reuse.	<u>/</u> 09/08/12	<u>/</u> B. A 09/08/12	<u>/</u> B. A 09/08/12	
			<u>↓</u>					

NOTE: Date & initial all entries

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Item ID: D130-700-011

Accept



Setup Start



Revision ID: A

Stop



Item Name: Bearpaw

Start Date: 12/08/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 14/08/2009 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

160

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

50K18 9/8/17 (4) SP

170

QC4- 100% Inspect kits for completeness

0.00



QC

Memo

0.00

Quality Control

=> 50K18/26



180

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D130-700-011
Location: _____

REVA

9/8/20 (4) SP

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Item ID: D130-700-011

Accept

Setup Start

Revision ID: A

Stop

Item Name: Bearpaw

Start Date: 12/08/2009 Start Qty: 4.00

Cust Item ID:

Required Date: 14/08/2009 Req'd Qty: 4.00

Customer:

Reference:

Run Start

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC21- Final Inspection - Work Order Release

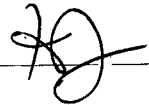
0.00

QC

Memo

0.00

Quality Control

09/08/31 
PL 09-8-28 ④

Picklist Print

Page 1

August 11, 2009 10:14:23 AM

Work Order ID: 51223

Parent Item: D130-700-011RevA

Parent Item Name: Bearpaw

Start Date: 12/08/2009

Required Date: 14/08/2009

Start Qty: 4.00

Required Qty: 4.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN4-12A		Purchased	No			170	Each	457.0000	16.0000			



Bolt

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

457

111605

57

111925

100

112314

300

111605

SP

AN4-15A



Bolt

Purchased

No

170

Each

1,006.000 32.0000



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

1006

107737

8

108077

1

108868

7

109148

18

110399

8

111295

964

111295

9/8/17

SP

Picklist Print

Page 2

August 11, 2009 10:14:23 AM

Work Order ID: 51223



Parent Item: D130-700-011RevA



Parent Item Name: Bearpaw

Start Date: 12/08/2009

Required Date: 14/08/2009

Start Qty: 4.00

Required Qty: 4.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD416	412	Purchased	No			170	Each	11,252.00	48.0000			
<div> </div>												
<div> </div>												
Washer												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

11252

102929

2

105906

4

107321

23

107939

114

108161

553

108827

31

109249

69

110523

340

111279

116

111916

5000

112314

5000

16941

0

11916

9/8/17

46

56

Picklist Print

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Work Order ID: 51223



Parent Item: D130-700-011RevA



Parent Item Name: Bearpaw

Start Date: 12/08/2009

Required Date: 14/08/2009

Start Qty: 4.00

Required Qty: 4.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2274RevF Radius Block	112	Manufactured	No			170	Each	496.0000	48.0000			

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

496

22494

0

23174

0

36624

17

38173

6

42099

34

43838

62

47796

207

50227

170

47796 SP

D2519RevD

14

Manufactured

No

170

Each

101.0000

16.0000



Clamp

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

101

42407

17

43842

84

42407

9/8/07

Picklist Print

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Work Order ID: 51223

Parent Item: D130-700-011RevA

Parent Item Name: Bearpaw

Comments:

Start Date: 12/08/2009

Required Date: 14/08/2009

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2529RevE	212	Manufactured	No			170	Each	265.0000	48.0000			

Washer

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

265

45388

265

170

Each

19.0000

16.0000

D3171-1RevA

Manufactured

No

Angle

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

19

38176

1

43860

18

45388

43860

(1X) B51410
9/8/20

#59/8/17 (4K) SO

Picklist Print

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Work Order ID: 51223

Parent Item: D130-700-011RevA

Parent Item Name: Bearpaw

Comments:

Start Date: 12/08/2009

Required Date: 14/08/2009

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21042L4	812	Purchased	No			170	Each	9,911.000	48.0000			



S
74 Nut

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	9911	
107499	5	
110507	1869	
111827	5996	
112314	2000	
15924	0	
8182	41	

110507

9/8/17

MUHMWB10

Purchased

No

120

sf

400.1010

28.7158



UHMW 1" Black

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
MAT	278.991	
110186	278.991	
Main Warehouse		
ST	121.11	
108762	18	
109186	5	
110520	8	
110721	24	
111354	66.11	
112186		

112186

B 9-8-11

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Shop Packet Print

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Picklist Print

Page 6

August 11, 2009 10:14:23 AM

Work Order ID: 51223

Parent Item: D130-700-011RevA

Parent Item Name: Bearpaw

Comments:

Start Date: 12/08/2009

Required Date: 14/08/2009

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2182B060RevC Clamp Cushion	x4 @ 6.00" long	Manufactured	No			170	Each	0.0000	16.0000			

Clamp Cushion

measures
5 1/8" long

(x4) - cut to 6.00" per day
(A2182 B060)

08/08/17

D2182D

8/8/17

1345405

9/8/17

9/8/17

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Shop Packet Print

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DART AEROSPACE LTD		Work Order:	51223
Description: Bearpaw		Part Number:	D3167-1
Inspection Dwg: D3167 Rev: A1		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Inspection Sheet	Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
A	0.06 x 45°	+0.030/-0.010	0.064 x 45°	✓			
B	5.80	+/-0.030	5.796	✓			
C	0.25 x 45°	+/-0.030	0.253 x 45°	✓			
D	R0.25	+/-0.030	R0.25	✓			
E	0.200	+/-0.030	0.198	✓			
F	0.250	+/-0.010	0.256	✓			
G	0.625	+/-0.030	0.629	✓			
H	0.375	+/-0.010	0.378	✓			
I	0.950	+0.030/-0.010	0.966	✓			
J	3.21	+/-0.030	3.215	✓			
K	19.00	+/-0.030	19.00	✓			
L	Ø0.260	+0.005/-0.000	Ø 0.260	✓			
M	Ø0.93	+/-0.030	Ø 0.931	✓			
N	0.30	+0.030/-0.000	0.306	✓			
O	0.375	+/-0.030	0.377	✓			
P	7.23	+/-0.030	7.23	✓			
Q	4.54	+/-0.010	4.543	✓			
R	2.00	+/-0.030	2.001	✓			
S	12.000	+/-0.010	12.000	✓			
T	6.000	+/-0.010	6.000	✓			
U	23.75	+/-0.030	23.75	✓			

Measured by:	M. A	Audited by:	mmf	Prototype Approval:	N/A
Date:	09/08/12	Date:	09/08/12	Date:	N/A

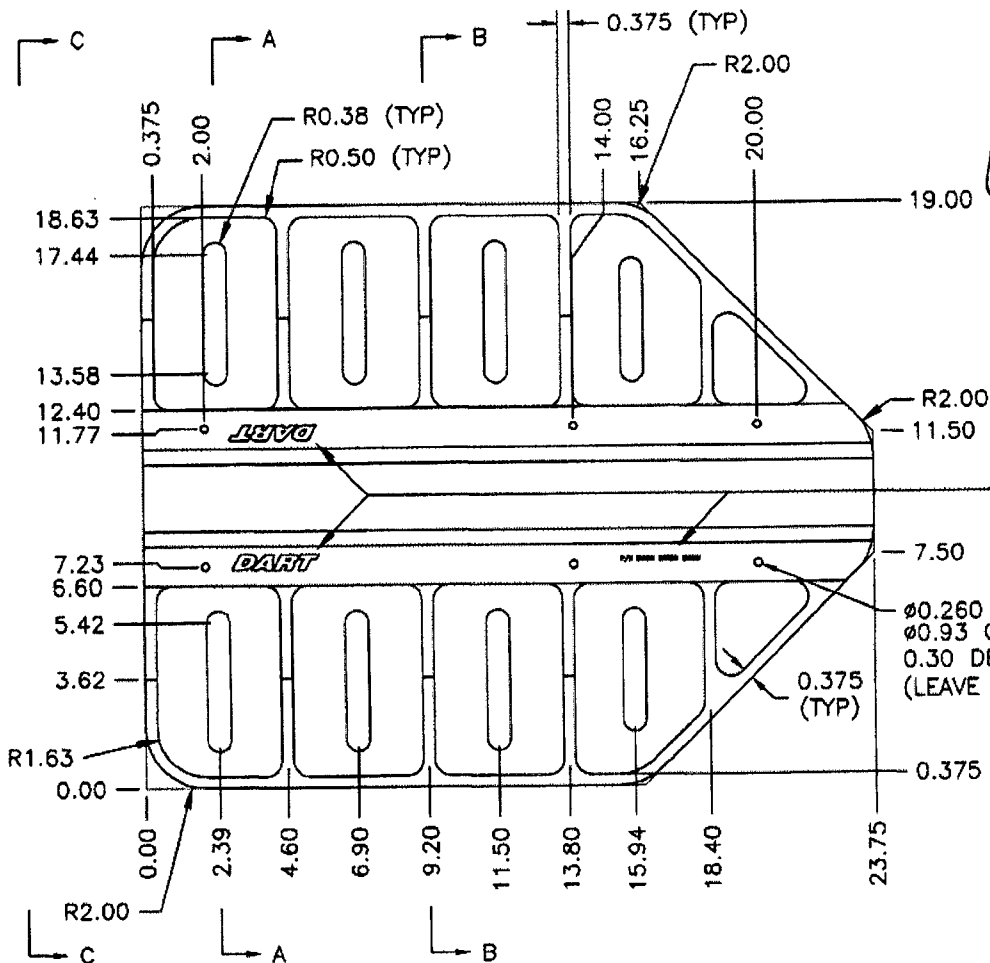
Rev	Date	Change	Revised by	Approved
A	03.09.22	New Issue P/O D130-700-011	KJ/RF	



DESIGN		DRAWN BY		DART AEROSPACE LTD	
CHECKED		APPROVED		HAWKESBURY, ONTARIO, CANADA	
DATE		DRAWING NO.		REV. A	
02.10.08		D3167		SHEET 1 OF 2	
TITLE		SCALE		1:6	
BEARPAW					
NEW ISSUE					
02.10.08		02.12.17			
A		5.80 WAS 5.50			
A1					

RELEASED
02.10.25-4

51223



ENGRAVE LOGO TO MAX
DEPTH OF 0.012. ENGRAVE
PART AND BATCH NUMBERS
TO MAX DEPTH OF 0.010.
(TYPICAL LOCATION AS
ILLUSTRATED)

Ø0.260 (TYP)
Ø0.93 C BORE
0.30 DEEP FROM BOTTOM
(LEAVE 0.650 MIN.)

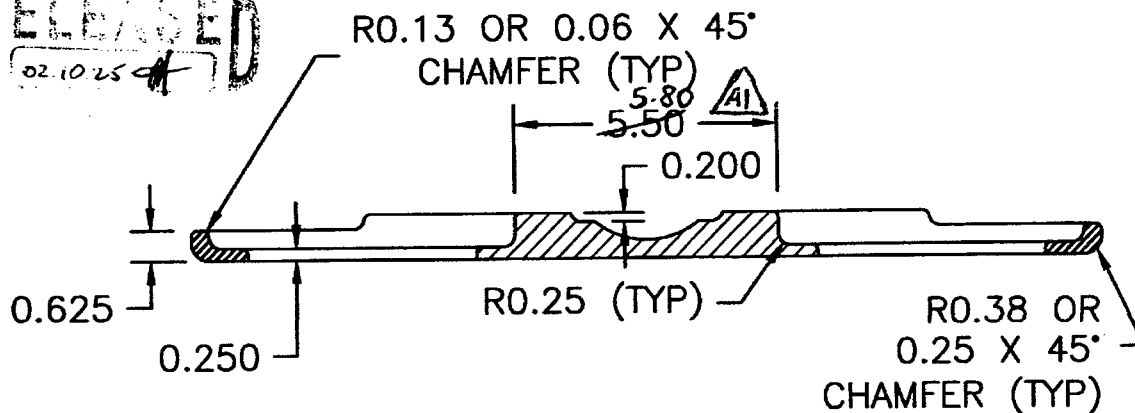
D3167-1

MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

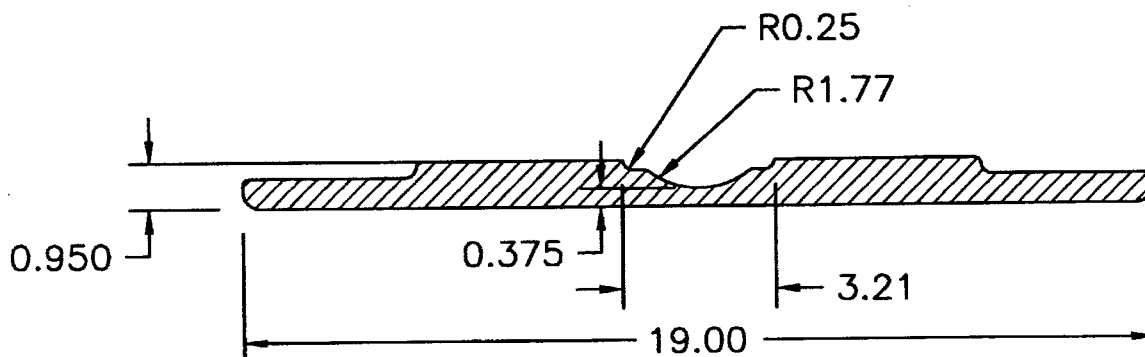


DESIGN 	DRAWN BY 	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 	APPROVED 	DRAWING NO. D3167	REV. A SHEET 2 OF 2
DATE 02.10.08		TITLE BEARPAW	SCALE 1:4

RELEASED
02.10.25

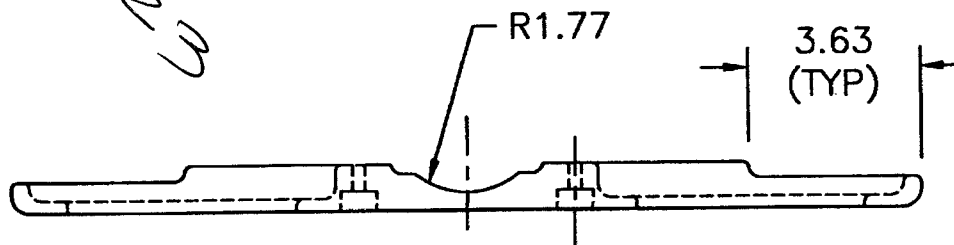


SECTION A-A



SECTION B-B

51223



SECTION C-C

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32.3 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D130-700-011 Bearpaw Installation	12.5 lb 5.67 kg	0.0 in 0.0 m	0.0 lb-kg 0.0 m-kg	159.8 in 4.05 m	1998 in-lb 23.0 m-kg

32.4 PARTS LIST

Qty	Part Number	Description
X	D130-700-011	BEARPAW INSTALLATION
4	D2182B060	Rubber Cushion
12	D2274	Radius Block
12	D2529	Washer
4	D2519	Clamp
2	D3167-1	Bearpaw
4	D3171-1	Angle
4	AN4-12A	Bolt
8	AN4-15A	Bolt
12	AN960JD416	Washer
12	MS21042L4	Nut (or MS21042-4)

TC Accepted
DEC 18 2002

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